

Title (en)
SYNTHESIS OF (-)-BETA-ELEMENE, (-)-BETA-ELEMENAL, (-)-BETA-ELEMENOL, (-)-BETA-ELEMENE FLUORIDE AND THEIR ANALOGUES, INTERMEDIATES AND COMPOSITION AND USES THEREOF

Title (de)
SYNTHESE VON (-)-BETA-ELEMEN, (-)-BETA-ELEMENAL, (-)-BETA-ELEMENOL, (-)-BETA-ELEMENFLUORID UND ANALOGA, ZWISCHENPRODUKTE UND ZUSAMMENSETZUNGEN DAVON UND DEREN ANWENDUNGEN

Title (fr)
SYNTHESE DE (-)-BETA-ELEMENE, (-)-BETA-ELEMENAL, (-)-BETA-ELEMENOL, FLUORURE DE (-)-BETA-ELEMENE ET LEURS ANALOGUES, INTERMEDIAIRES ET COMPOSITION ET UTILISATIONS DE CEUX-CI

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Abstract (en)
[origin: US2007135526A1] The present invention provides convergent processes for preparing (-)-beta-elemene, (-)-beta-elemenal, (-)-beta-elemenol, and (-)-beta-elemene fluoride and analogues thereof. Also provided are intermediates useful for preparing (-)-beta-elemene. The present invention further provides novel compositions based on analogues of (-)-beta-elemene, (-)-beta-elemenal, (-)-beta-elemenol, (-)-beta-elemene fluoride and methods for the treatment of cancer, such as brain tumor, lung cancer, breast cancer, prostate cancer, ovarian cancer, colorectal cancer, gastric intestinal cancer, and stomach cancer. The inventors propose a combination therapy using 1) one or more of the following anti-cancer agents: including, but not limited to, Cisplatin, 5-FU, Taxol, Taxol derivatives, and any anti-cancer agent, and 2) one or more of the following (-)-beta-elemene and its analogs, including (-)-beta-elemene, (-)-beta-elemenal, (-)-beta-elemenol, (-)-beta-elemene fluoride, and their analogs, and (-)-beta-elemene's intermediate in its chemical synthesis, for the treatment of cancer, especially for the treatment of brain tumor, lung cancer, ovarian cancer, bladder cancer, cervical cancer, colon cancer, breast cancer, and prostate cancer.

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